The embodiments of the invention in which an exclusive property or privilege is claimed are defined as follows:

1. A diversely routed high bandwidth hybrid fiber-analog communication system comprising:

at least one fiber optic path connected to a data signal distribution network for bi-directional transmission of data signals;

at least one coaxial path connected to a data signal distribution network for bi-directional transmission of data signals; and

an optical node with one or more electronic modules coupled to the fiber optic and coaxial paths.

2. The system of claim 1, wherein the optical node receives the data signals of the fiber optic path.

3. The system of claim 2, wherein the optical node converts the data signals of the fiber optic path to analog signals and transmits the data signals on the coaxial path.

4. The system of claim 1, wherein the optical node receives the data signals of the coaxial path.

5. The system of claim 4, wherein the optical node converts the data signals of the coaxial paths to optical signals and transmits the data signals on the fiber optic paths.

6. The system of claim 1, further comprising at least one electronic power supply module coupled to the optical node for providing redundant power to one or more electronic modules.

7. The system of claim 1, further comprising at least one power supply pack coupled to the optical node for providing redundant power to the optical node.

8. A diversely routed high bandwidth hybrid fiber-analog communication system comprising:

a plurality of fiber optic paths connected to a data signal distribution network for a bi-directional transmission of data signals;

a plurality of coaxial paths connected to a data signal distribution network for a bi-directional transmission of data signals;

an optical node with a plurality of electronic modules coupled to the fiber optic and coaxial paths for:

receiving the data signals of said plurality of fiber optic paths;

converting the data signals to analog signals and transmitting the data signals on the plurality of coaxial paths;

receiving the data signals of the plurality of coaxial paths; and

converting the data signals to optical signals and transmitting the data signals on the plurality of fiber optic paths;

a plurality of power supply electronic modules coupled to the optical node for providing redundant power to the plurality of electronic modules; and

a plurality of power supply packs coupled to the optical node for providing redundant power to the optical node.

9. The system of claim 8, wherein the plurality of fiber optic paths includes a primary fiber optic path.

10. The system of claim 8, wherein the plurality of fiber optic paths includes a secondary fiber optic path.

11. The system of claim 8, wherein the plurality of coaxial cable paths includes a primary coaxial cable path.

12. The system of claim 8, wherein the plurality of coaxial cable paths includes a secondary coaxial cable path.

13. The system of claim 9, wherein the primary fiber optic path is for the downstream transmission of analog and digital signals.

14. The system of claim 9, wherein the primary fiber optic path is for the upstream transmission of analog and digital signals.

15. The system of claim 10, wherein the secondary fiber optic path is for the downstream transmission of digital signals.

16. The system of claim 10, wherein the secondary fiber optic path is for the upstream transmission of digital signals.

17. The system of claim 11, wherein the primary coaxial path is for the downstream transmission of analog and digital signals.

18. The system of claim 11, wherein the primary coaxial path is for the upstream transmission of analog and digital signals.

19. The system of claim 11, wherein the secondary coaxial optic path is for the downstream transmission of digital signals.

20. The system of claim 11, wherein the secondary coaxial path is for the upstream transmission of digital signals.

21. The system of claim 8, wherein the downstream transmission data signals are in the range of 5MHz to 870MHz.

22. The system of claim 8, wherein the upstream transmission data signals are in the range of 5MHz to 220MHz.

23. The system of claim 8, wherein the data signal is received by a subscriber of the data distribution network.

24. The system of claim 23, wherein a diplexer for separating or combining the data signals diplexes the data signal received by a subscriber.

25. The system of claim 8, wherein the data signal is transmitted by a subscriber of the data distribution network.

26. The system of claim 25, wherein a diplexer for separating or combining the data signals diplexes the data signal transmitted by the subscriber.

27. A method of transmitting bi-directional data signals between a network head-end and at least one subscriber, the data signals including both analog and digital data, comprising:

transmitting data signals on at least one optical or coaxial data signal path from the head-end or one or more subscriber;

receiving the data signals at an optical node having at least one module for processing the data signals through the optical node, which module is coupled to the data signal path;

converting the data signals to optical or analog signals; and

transmitting the converted optical or analog signals to the head-end or to the one or more subscribers via the one or more optical or coaxial data signal paths.